

REMARKS

Claims 1-10, 12-25, 27-30, and 45-57 were previously allowed in a notice of allowance mailed May 6, 2003. Applicants submit this amendment with a Request for Continued Examination and present new claims 58-131, which comprise three separate claim sets. Please enter the amendment to pending claims 1, 6, 7, 17, 21, 22, 50, and 56.

Most amendments to the pending claims make minor clarifications. Note that the amendments to claims 50 and 56 find support at page 42, lines 20-31, for example. The amendments to claims 7 and 22 find support at page 4, lines 21-25.

A first new claim set (claims 66-89) presents claims similar to claims 1-65 in many regards. But operation (v) in claims 1 and 17 has been replaced with a new limitation that provides alignment of the product strings. Support for the alignment operation (v) is found at various places in the specification. See for example, the paragraph of the definition section beginning at page 8, line 7 (particularly lines 18-20). In addition, in section V, 3rd paragraph (page 25, line 17 et seq.), "similarity index" is identified as a selection criterion for concatenated strings. To monitor similarity requires an alignment. See e.g., first paragraph under heading III, B, 4 (page 19, line 15).

The second new claim (claims 90-115) recite that the initial character strings of operation (i) are obtained by "encoding two or more *naturally occurring* biological molecules." These claims find support in original claims 3 and 5, page 10, line 28 to page 11, line 26, and page 12, lines 12-18.

The last set of new claims (claims 120-135) presents modified versions of operations (v) and (vi) in which the selection of product strings is performed on the basis of one or more computationally predicted properties such as molecular weight, hydrophobicity, etc. Support for these new claims can be found at page 25, lines 26-27, for example. Support for new claims 117 and 125 can be found at page 25, lines 28-32.

In addition, several new dependent claims recite values of sequence identity that are greater than 30% (see for example, claims 58-65). These claims find support at page 4, lines 16-18.

Applicants believe that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a

telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,

BEYER WEAVER & THOMAS, LLP

A handwritten signature in black ink, appearing to read "Jeffrey K. Weaver", with a long horizontal flourish extending to the right.

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